

APPLICATION NO. 09/509,377  
FILING DATE 08/28/2000  
FIRST NAMED INVENTOR Sergey Matasov  
ART UNIT 3739

**Board of Patent Appeals and Interference**  
US Patent and Trademark Office  
PO Box 1450  
Alexandria, Virginia 22313-1450  
United States of America

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*By fax only*

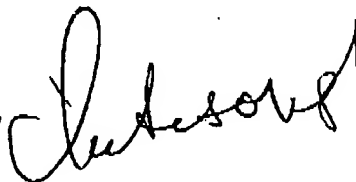
Total sheets, including the present one: 9

In response to the Office communication from June 28, 2007 the applicant files the amended Appeal Brief.

Enclosures:

- |                   |            |
|-------------------|------------|
| 1. Amended Claims | on 1 sheet |
| 2. List of claims | on 1 sheet |

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## APPEAL BRIEF

APPLICATION NO.	09/509,377
FILING DATE	08/28/2000
FIRST NAMED INVENTOR	Sergey MATASOV
ART UNIT	3739
EXAMINER	Leubecker, John P.
MAILING DATE	12 July, 2007

**1) Real party in interest.**

applicant, inventor    Sergey MATASOV

**2) Related appeals and interferences**

none

**3) Status of claims**

Claim 1        (Currently amended, appealed).

Claims 2 - 11 (Withdrawn).

Claim 12       (Currently amended).

Claims 13-16 (Withdrawn).

Claims 17-18 (Currently amended).

Claims 19-22 (Withdrawn).

**4) Status of amendments.**

Claims 4, 5, 10, 11, 13, 15, 21, 22 are withdrawn.

Claims 1, 12, 17, 18 are amended.

The disclosure page 1, line 17 is corrected.

**5) Summary of claimed subject matter.**

The invention relates to the field of medicine, namely to colonoscopy and enteroscopy (page 1, line 7).

Concretely the present invention relates to endoscopes, wherein the transportation of an endoscopic tube is provided by an invaginator - a thin-walled tube eversible under fluid pressure (page 1, lines 12-13).

The objectives of the invention have been to increase reliability and convenience of introduction of an endoscopic tube, to perform biopsy in flexuous channels (*page 2, line 37-page 3, line 1*).

The increase of safety and convenience of introduction of the endoscopic tube (3) is ensured by the invaginator (23) formed in a compact hollow cylinder, which has a gap (25) with the endoscopic tube (3) (*page 3, lines 16-17, 21-22; Fig. 1*).

Along with the invaginator, the convenience of the introduction is ensured by the mechanism (53) for introduction of the endoscopic tube (3), comprising a hermetic cavity (60), limited by a cylinder (56), a piston (57), an elastic tube (59) and is connected to fluid pressure (*page 3, lines 31-33; Fig. 4c*).

For performing biopsy in flexuous channels the invention comprises a biopsy channel connected to fluid pressure and a biopsy forceps (63), which are a flexible hermetic tube with a piston (66) of the biopsy channel on the distal end of said tube and comprise an intensifier (71) of a traction line, which intensifier comprises an executing cylinder-piston unit, located on the distal end of the hermetic tube and of the traction line (*page 4, lines 23-30; Fig. 4d*).

Implementation of said objectives will make colonoscopy available to general practice doctors, will make it easier for experienced endoscopists, gastroenterologists, abdominal surgeons (*page 3, lines 1-2*).

**6) Grounds of rejection to be reviewed on appeal.**

Objection concerning identification of reference on SU 1522466 in the specification.

Rejections of claims 11-13, 15, 17, 18 and 22 under 35 USC § 112 second paragraph, as being indefinite.

Rejections of claim 1 under 35 USC § 102(d) as being anticipated by SU 1522466.

Rejections of claims 13 and 15 under 35 USC § 103.

Indication concerning the allowance of claims 12, 17 and 18.

**7) Argument.**

**Concerning the section "Specification".**

As to item 2.

The objection is accepted -- „0000-00-00" on page 1, line 17 of the disclosure from August 10, 2005 is replaced by "April 20, 1999" (see Enclosure 1), as SU 1522466 became

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accessible to public (by MPEP, Section 2128) on April 20, 1999 under the publication of patent application of P-97-190 (LV), which serves as the priority application for the present application No. 09/509,377.

We did not ascertain any information about the identification form of references to an inventor's certificate having the priority and registration dates before the filing date of the priority application and being published after its filing date, but before the filing date of the present application in the Patent and Trademark Office. Therefore additionally is given the following formal data from the Inventor's Certificate SU 1522466 by Matasov:

- o "Priority of the invention: August 21th, 1978" (see the title-page);
- o "Registered in the USSR State register of inventions on July 15th, 1989" (see the title-page);
- o "FOR OFFICE USE ONLY COPY № 03" (see the 1<sup>st</sup> page).

On the Online Public File Inspection EPOLINE (<http://www.epoline.org>) the publication of SU 1522466 took place on March 31, 2003, however in the column "publication date" the European PO specified "0000-00-00".

#### **Concerning the section "*Claim Rejections – 35 USC § 112*".**

##### **As to item 4.**

Claims 11-13, 15, 17, 18 and 22 were rejected by examiner under 35 U.S.C. 112, second paragraph, as being indefinite.

In the amended Claims the claims 11, 13, 15 and 22 are withdrawn, but in the claims 12, 17 and 18 references are properly corrected.

#### **Objections concerning the section "*Claim Rejections – 35 USC § 102*".**

##### **As to item 6.**

The examiner rejected the claim 1 under 35 U.S.C. 102(d) as being anticipated by SU 1522466. At that was alleged that SU 1522466 discloses the "cartridge (4) ... formed of a compact cylinder (7)" and "Inherently there is a gap between the cylinder and the endoscopic tube".

In accordance with 37 CFR § 1.192 (c)(8) (iii) an applicant should specify the errors in the rejection and why the rejected claim is patentable under 35 U.S.C. 102.

The error in the rejection is the examiner's allegations that SU 1522466 discloses the "cartridge (4) ... formed of a compact cylinder (7)" and "Inherently there is a gap between the cylinder and the endoscopic tube", as there is no arguments in favour of this assertion. Thereupon examiner did not cited any.

So as to prove the patentability of claim 1, should be refuted the the assertions of examiner that SU 1522466 discloses the "cartridge (4) ... formed of a compact cylinder (7)" and "Inherently there is a gap between the cylinder and the endoscopic tube".

SU 1522466 comprises 5 obvious evidences of friable (non-compact) structure of invaginator and of absence of a gap between it and the light pipe 3. So, invaginator by SU 1522466:

1. *"is executed as pleated"* (see the Claims; column 3, line 3 and others; drawing), that is it has small parallel pleats, which facilitate its gathering on the light pipe 3;
2. is *"gathered on the light pipe 3"* (see column 4, lines 19-20);
3. is *"adjacent to the light pipe"* (see the Claims; column 3, line 2);
4. could be longitudinally compressed (see column 3, lines 48-51);
5. cuddles to the light pipe 3 under the action of working pressure (see col. 4, lines 47-49);

Besides, in the text of SU 1522466 there are absent:

- word-combination "formed of a compact cylinder",
- word-combination "compact cylinder",
- word "cylinder",
- word "gap".

The detailed description of friability (non-compactness) of the pleated invaginator and absence of its gap with an endoscopic tube, is both in the SU 1522466 and in the present application:

- *"When the difficulties appears with the insertion of the light pipe 3 ... there is necessary to reduce on few seconds the pressure to zero and then repeatedly raise it till the working level and to continue insertion of the light pipe. In the moment of absence of pressure the pleated part of tube does not cuddle to the light pipe and under the action of spring 10 is able to displace to the projection 6 on the place of tube, which has turned into everted part."* (see SU 1522466, column 4, lines 40-49);
- "The invaginator is to be everted under tip 6, but during invagination the distal part of tube 3 becomes bared. It can be due both to lack of a gap between tube 3 and uneverted part of the invaginator and to a friable structure of the latter, which under the action of air pressure adheres to tube 3." (see the original specification from October 2, 1998, page 1, lines 37-41);

By the compactness the pleated invaginator according to SU 1522466 and the invaginator according to the present application are compared approximately as a haystack and a wafer of hay. Here are 5 positive differences of invaginator according to the present application, formed in

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a compact hollow cylinder which has a gap with an endoscopic tube. So, invaginator according to the present application:

1. "is formed of crumpled and tightly compressed in longitudinal and transverse directions short layers of different forms of an eversible thin-walled tube" (see the original specification from October 2, 1998, page 3, lines 24-25);
2. is not gathered on the endoscopic tube, but is putted on it as a whole,
3. does not cuddle to the endoscopic tube, because the diameter of the inner forming (moulding) rod is larger than the diameter of the endoscopic tube,
4. could not be longitudinally compressed because is formed in the longitudinal direction,
5. does not cuddle to the endoscopic tube under the action of working pressure, because is formed in the transverse direction.

One can see evidently, that invaginator according to the present application, formed in a compact hollow cylinder which has the gap with the endoscopic tube, is not the subject-matter of SU 1522466. Therefore, the rejection of claim under 35 U.S.C. 102(d), as anticipated by SU 1522466, is an error.

Please, also note that from 9 patent offices, which made the examination of the application PCT/LV98/00006, solely the USPTO asserted, that the invaginator, formed in a compact hollow cylinder which has a gap with the endoscopic tube, is disclosed in the inventors certificate SU 1522466.

The claim 1 is amended, the claims 4, 5, 10, 11, 21, 22 are withdrawn.

**Concerning the section "Claim Rejections – 35 USC § 103".**

**As to items 8, 9**

Claims 13 and 15 are withdrawn.

**Concerning the section "Allowable Subject Matter".**

**As to items 10**

Claims 12, 17 and 18 are amended in accordance with objections of the Examiner. These claims completely correspond to the version, allowed by the Examiner in the Office action from February 12, 2007. The version of claims 12, 17 and 18 filed on May 8, 2007 I kindly ask to consider as nullified – it was distorted through translator's fault.

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#### 8) Claims appendix

1. An endoscope comprising an invaginator in the form of a tube eversible under fluid pressure, which is arranged by pleats on the distal part of an endoscopic tube (3), characterized in that the invaginator (23) is formed in a compact hollow cylinder, which has a gap (25) with the endoscopic tube (3).

12. The endoscope according to claim 1, further comprising a mechanism (53) for introduction of the endoscopic tube (3) into the everted part of the invaginator, which mechanism comprises a hermetic cavity (60), limited by a cylinder (56), a piston (57), an elastic tube (59) and is connected to fluid pressure.

17. The endoscope according to claim 1, wherein the endoscopic tube (3) comprises a biopsy channel, connected to fluid pressure and biopsy forceps (63), which are a flexible hermetic tube with a piston (66) of the biopsy channel on the distal end of said tube.

18. The endoscope according to claim 17, wherein the biopsy forceps (63) comprise an intensifier (71) of a traction line, which intensifier comprises an executive cylinder-piston unit, located on the distal end of the hermetic tube and of the traction line.

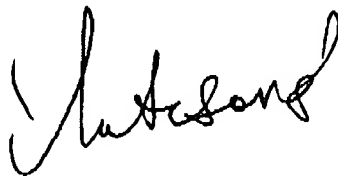
#### 9) Evidence appendix

none

#### 10) Related proceedings appendix.

none

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Amended claims. Clean version

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Enclosure No. 1

AMENDED CLAIMS. CLEAN VERSION

I claim:

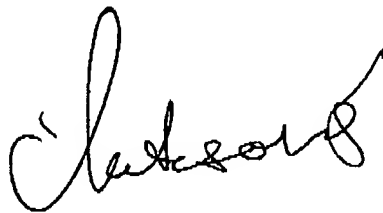
5 1. An endoscope comprising an invaginator in the form of a tube eversible under fluid pressure, which is arranged by pleats on the distal part of an endoscopic tube (3), characterized in that the invaginator (23) is formed in a compact hollow cylinder, which has a gap (25) with the endoscopic tube (3).

10 12. The endoscope according to claim 1, further comprising a mechanism (53) for introduction of the endoscopic tube (3) into the everted part of the invaginator, which mechanism comprises a hermetic cavity (60), limited by a cylinder (56), a piston (57), an elastic tube (59) and is connected to fluid pressure.

15 17. The endoscope according to claim 1, wherein the endoscopic tube (3) comprises a biopsy channel, connected to fluid pressure and biopsy forceps (63), which are a flexible hermetic tube with a piston (66) of the biopsy channel on the distal end of said tube.

20 18. The endoscope according to claim 17, wherein the biopsy forceps (63) comprise an intensifier (71) of a traction line, which intensifier comprises an executive cylinder-piston unit, located on the distal end of the hermetic tube and  
25 of the traction line.

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Listing of claims

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Enclosure No. 2

LISTING OF CLAIMS

I claim:

**Claim 1 (currently amended).** An endoscope with ~~disposable cartridges for the invagination of endoscopic tube~~, comprising

- ~~o an endoscopic tube (3) having a distal part with a guided distal end;~~
- ~~o a disposable cartridge located on the distal part of the endoscopic tube (3) and comprising an invaginator of the endoscopic tube, which invaginator is an eversible tube in the form of a tube eversible under fluid pressure, with an uneverted end (7) joined with the endoscopic tube (3), and an uneverted part of invaginator formed by pleats into a compact hollow cylinder (23), having a gap (25) with the distal part of the endoscopic tube (3) which is arranged by pleats on the distal part of an endoscopic tube (3), characterized in that the invaginator (23) is formed in a compact hollow cylinder, which has a gap (25) with the endoscopic tube (3).~~

**Claims 2-3 (not entered).**

**Claims 4-5 (withdrawn).**

**Claims 6-9 (not entered).**

**Claims 10-11 (withdrawn).**

**Claim 12 (currently amended).** The endoscope according ~~to any of claims 1 to 6 to claim 1~~, further comprising a mechanism (53) for introduction of the endoscopic tube (3) into the everted part of invaginator, which mechanism comprises a hermetic cavity (60), limited by a cylinder (56), a piston (57), an elastic tube (59) and is connected to fluid pressure.

**Claim 13 (withdrawn).**

**Claim 14 (not entered).**

**Claim 15 (withdrawn).**

**Claim 16 (not entered).**

**Claim 17 (currently amended).** The endoscope according ~~to any of claims 1 to 6 to claim 1~~, wherein the endoscopic tube (3) comprises a biopsy channel connected to fluid pressure and biopsy forceps (63), which are a flexible hermetic tube with a piston (66) of the biopsy channel on the distal end of said tube.

**Claim 18 (currently amended).** The endoscope according to claim ~~14~~ 17, wherein the biopsy forceps (63) comprise an intensifier (71) of a traction line, which intensifier comprises an executive cylinder-piston unit, located on the distal end of the hermetic tube and of the traction line.

**Claims 19-20 (not entered).**

**Claim 21-22 (withdrawn).**

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